

# NOTES ON THE RED LIONFISH AND ITS OCCURRENCE IN DARWIN WATERS.

By Keith Martin

On the 13th May, 1978, whilst on a diving trip with members of the Darwin Sub-Aqua Club, I encountered a specimen of the Red Lionfish (*Pterois volitans*).

The fish was located resting upside-down on the roof of a large coral overhang in about five metres of water, on the edge of a deep gutter (known locally as the "Blue Hole") at Gunn Point Reef, approximately sixty kilometres to the North-East of Darwin. On sighting the fish, I immediately returned to the nearby boat to collect my nets. On returning to the cave, I gently prodded the specimen with a net, whereupon it moved slowly into the open and offered little attempt to escape. The fish was carefully scooped up and transferred into a container back on board the boat, being particularly careful not to damage the beautiful fins or touch their poisonous spines. Not wishing to take any chances with my prize, I headed straight back to the beach and took the Lionfish by road back to Darwin, where it was housed in a 200 litre "natural system" aquarium. The fish settled down to captivity quickly and as I write, six months later, it is still in prime condition.

About ten species of Lionfishes occur throughout the Indo-Pacific Region. All are of similar appearance, and could not be confused with any other group of fishes. The Red Lionfish is a common and widespread species, being distributed throughout the Indo-Pacific. In Australia, it is generally confined to the tropics, but may be encountered as far south as Jervis Bay, in Southern N.S.W. For some reason, however, Lionfish are somewhat rare in the Darwin area, and the capture of this specimen created some excitement and envy amongst local aquarists. In fact, of several members of the Sub-Aqua Club present at the time of capture, only one could recall having seen the species in Darwin previously.

*Pterois volitans* grows to a length of about thirty five centimetres, and has a fin ray count as follows:

DX 111/10-11; A 111/6-7; P X1V; Sc 80-105.

It has a red or brownish-red colouration (some QLD and NSW specimens are black), with numerous dark red transverse bands, usually in

groups; four on the head and 24 - 28 on the body interspaced with silvery white. The fins have dark spots and blotches, the anal and caudal fins with rows of small blackish spots.

The species was first described in 1758 by Karl Linnaeus, the famous inventor of our present day system of biological classification.

Linnaeus originally placed the species in the genus *Gasterosteus*, and records the type locality as Amboina.

Kent (1889) first recorded the presence of *P. volitans* at Port Darwin, but more recent records of this fish's occurrence in the Darwin area are rather scanty. Fisheries Research Section (Div. Prim. Ind.) have a handful of specimens in their collection, mostly taken by trawlers working in the Shoal Bay area. Mr. K. Roth (pers. comm.) reports the species as not uncommon off Lee Point prior to Cyclone Tracy, although it is doubtful that the cyclone had any effect on the fish's population.

Some years ago, a large Lionfish was reputed to have been caught on a handline at the main Darwin wharf, and Mr. W. Allen (pers. comm.) reports that Lionfishes are frequently observed around the wharf pylons by divers.

*Pterois volitans* is widely known by a variety of common names, such as the Lionfish, Turkeyfish, Fireworksfish and Butterfly Cod. I dislike the use of the latter name, as the species is totally unrelated to either the true Cod (*Serranidae*) or the Butterflyfishes (*Chaetodontidae*).

It is, in fact, a member of the large family *Scorpaenidae*, and is therefore closely related to the Scorpionfishes, Bullrout, Fortesque, and Stonefish.

Like all *Scorpaenids*, the Lionfish is in possession of a number of poisonous dorsal spines which are capable of inflicting painful or fatal injuries to humans.

Southcott (1975) reports the following symptoms resulting from Lionfish stinging: "Apart from pain, the immediate effect of an envenomation may be hypotension, bradycardia, and impairment of

respiration. On occasions oxygen therapy has been required for pulmonary oedema and other complications. Tissue necrosis has followed stings". Although no deaths have been reported in Australia from Lionfish stings, they should be regarded as highly dangerous and no attempt should be made to touch or handle these fishes. Anyone keeping Lionfishes in a home aquarium should be especially careful when cleaning or otherwise maintaining the tank, as the curious Lionfish will often swim over to investigate your arm.

In captivity, Lionfishes are not difficult to maintain, and are a beautiful addition to any marine aquarium. To date, my Lionfish has refused to eat anything but live food. Generally, anything small enough to be caught will be eaten. For most of the time, the Lionfish glides gracefully around the aquarium. The main feeding stimulus appears to be movement, for when a small fish is placed in the tank, the fish's attitude changes from one of quiet indifference, to excited interest, coinciding with a deepening intensity of the body colouration. The fish quickly swims up to the prey with fins outstretched and propelling itself along by lateral undulations of the caudal fin. The prey is literally sucked into the Lionfish's huge mouth. If a small animal is seen to swim into a hole, the Lionfish will wait patiently at that hole for hours, and sometimes days, until the prey reappears. On one occasion, I noticed him quietly concentrating on the base of a small piece of coral for about an hour. Suddenly, the fish jerked forward and instantly extracted a small crab from the crevice.

Although the Lionfish is a hunter by nature, it shows a remarkably inoffensive disposition towards fishes which are too large to be regarded as prey. In fact, in a mixed aquarium, its glorious fin spread is a favourite target for fin-nipping attacks by species such as Damselfishes (Pomacentridae). Therefore, it is probably best to house Lionfishes in a tank of their own, or else carefully choose their tankmates.

The Lionfish is a spectacularly beautiful, highly dangerous yet immensely interesting member of the Northern Territory's marine fauna. Its apparent scarcity in the Darwin area means that few people will have an opportunity of seeing one of these fishes. However, should you be lucky enough to encounter one of these animals, I feel sure you will be awed by this marvel of nature. But just remember - don't touch.

## REFERENCES:

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